

## Claims

- [c1] 1.A method of detecting the location of an interface between phases, comprising:  
introducing a reaction mixture into a vessel wherein the reaction mixture is the product of an at least two phase interfacial reaction, and a difference in densities between at least two of the phases is less than or equal to about 1 g/cc;  
separating the reaction mixture into the phases with an interface located therebetween;  
measuring electrical inductance of the reaction mixture at different latitudinal locations; and  
determining the location of the interface.
- [c2] 2.A method according to Claim 1, wherein the vessel is a plate decanter.
- [c3] 3.A method according to Claim 1, wherein the vessel is a coalescer decanter.
- [c4] 4.A method according to Claim 1, wherein the difference in densities is less than or equal to about 0.5 g/cc.
- [c5] 5.A method according to Claim 4, wherein the difference in densities is less than or equal to about 0.1 g/cc.
- [c6] 6.A method of detecting the location of an interface between two phases, comprising:  
introducing a reaction mixture into a vessel wherein the reaction mixture is the product of a two phase interfacial reaction for the preparation of polycarbonate;  
separating the reaction mixture into an organic phase and an aqueous phase with an interface located therebetween;  
measuring electrical inductance of the reaction mixture at different latitudinal locations; and  
determining the location of the interface.
- [c7] 7.A method according to Claim 6, wherein the vessel is a plate decanter.
- [c8] 8.A method according to Claim 7, wherein the vessel is a coalescer decanter.